#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-026042 Address: 333 Burma Road **Date Inspected:** 03-Jul-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Trial Assembly

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 13AE to Segment 13BE (Edge Beam to Edge Beam)

This QA Inspector performed Dimension Control Inspection on the Edge Beam to Edge Beam at Work Point E13 (Bike Path side) and at Work Point E14 (Cross Beam side) for the Segment 13AE to Segment 13BE between Panel Point (PP) 120 to PP 120.5 at the following locations:

The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The Sweep was measured at 100 mm from both sides of the Floor Beam and 800mm from both sides of floor Beam and at Center (Total 5 Locations) using string line.

The measurements were recorded out of tolerance, asked ZPMC to fix the out of tolerance areas and re-offer after rectifications.

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Segment 13BE to Segment 13CE (Edge Beam to Edge Beam)

This QA Inspector performed Dimension Control Inspection on the Edge Beam to Edge Beam at Work Point E13 (Bike Path side) and at Work Point E14 (Cross Beam side) for the Segment 13AE to Segment 13BE between Panel Point (PP) 122 to PP 122.5 at the following locations:

The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The Sweep was measured at 100 mm from both sides of the Floor Beam and 800mm from both sides of floor Beam and at Center (Total 5 Locations) using string line.

The measurements were recorded out of tolerance, asked ZPMC to fix the out of tolerance areas and re-offer after rectifications.

Segment 13BE to Segment 13CE (Full Height Longitudinal Diaphragm to Longitudinal Diaphragm)

This QA Inspector performed Dimension Control Inspection on the Full Height Longitudinal Diaphragm to Longitudinal Diaphragm at Work Point E3 (Bike Path side) and at Work Point E4 (Cross Beam side) for the Segment 13BE to Segment 13CE between Panel Point (PP) 122 to PP 122.5 at the following locations:

The offset was measured at 8 (Eight) different Elevations at vertical web plates.

At Elevation 20mm from the Bottom Panel.

At Elevation 1700mm from the Bottom Panel.

At Elevation 2000mm from the Bottom Panel.

At Elevation 3400mm from the Bottom Panel.

At Elevation 3600mm from the Bottom Panel.

At Elevation 4600mm from the Bottom Panel.

At Elevation 4800mm from the Bottom Panel.

At Elevation 5400mm from the Bottom Panel.

The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The Sweep was measured at 100 mm and 500mm from Floor Beam at Panel Points (PP) 122 and from PP 122.5 at Center (Total 5 Locations) using string line at Elevation 1700mm and 2800mm from Bottom Panel.

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The measurements were recorded out of tolerance, asked ZPMC to fix the out of tolerance areas and re-offer after rectifications.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer